

Recombinant Murine Vascular Endothelial Growth Factor 164

Product Information

Cat

CGF-092

Product Name

Recombinant Murine Vascular Endothelial Growth Factor 164

Synonyms

Vascular Endothelial Growth Factor Isoform 164

GenelD

Mm.282184.

Source

Escherichia coli.

Molecular Weight

Approximately 38.8 kDa, a disulfide-linked homodimeric protein consisting of two 165 amino acid polypeptide chains with Met at N-terminus.

AA Sequence

MAPTTEGEQK SHEVIKMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCAGC CNDEALECVP
TSESNITMQI MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKHCEPC SERRKHLFVQ DPQTCKCSCK
NTDSRCKARQ LELNERTCRC DKPRR

Purity

> 95 % by SDS-PAGE and HPLC analyses.

Biological Activity

Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using human umbilical vein endothelial cells(HUVEC) is less than 5 ng/ml, corresponding to a specific activity of $> 2.0 \times 10^5$ IU/mg.

Physical Appearance

Recombinant Murine Vascular Endothelial Growth Factor 164

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.

Endotoxin

Less than 1 EU/µg of rMuVEGF164 as determined by LAL method.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

Usage

This material is offered by Creative Biomart for research, For research and further manufacturing use only.

background

Vascular Endothelial Growth Factor is a sub-family of growth factors produced by cells, which stimulates vasculogenesis and angiogenesis. VEGF's normal function is to create new blood vessels during embryonic development, new blood vessels after injury, muscle following exercise, and new vessels (collateral circulation) to bypass blocked vessels. Mouse and rat express alternately spliced isoforms of 120, 164, and 188 amino acids (a.a.) in length. Recombinant mouse VEGF165 contains 165 amino acids residues (with a met at N-terminal) and it is a disulfide-linked homodimer. In addition, it shares 97 % a.a. sequence identity with corresponding regions of rat, 89 % with human and porcine, 88 % with bovine, and 90 % with

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feline, equine and canine VEGF, respectively.
